TUESDAY, August 22, 2017

Time	ROOM A	ROOM B	ROOM C	ROOM D	ROOM E
8:45–9:25	**PLENARY LECTURE** **M. Spohn: Phosphorus cycling in temperate forests**				
9:30–9:50	S6 DOC: **F. Hagedorn:** Tracking the sources and fate of dissolved organic matter in soils: Insights from labelling and radiocarbon studies	S16 Isotopes: **M. M. Savard:** Atmospheric N – Isotopic inheritance and fractionation	S8 Phosphorus: **J. L. Stoddard:** Large-scale increases in phosphorus in undeveloped catchments across the United States: Are oligotrophic systems disappearing?		S19 Arctics: **B. C. Forbes:** Siberian steppe-tundra ecosystems: Gradients of diversity and productivity in space and time
9:50–10:10	S6 DOC: **N. Catalán:** Dissolved organic matter reactivity across aquatic ecosystems and scales	S16 Isotopes: **L. Veerman:** The long-term fate of deposited N in coniferous forest ecosystems across Europe	S8 Phosphorus: **B. J. Huser:** Long-term phosphorus concentration declines in lake: Effects of climate, deposition, and in-lake cycling on P availability in Swedish boreal systems		S19 Arctics: **E. Potapov:** Apparent trends in the number of the mammals and birds in the Kolyma´s typical tundra subzone in the past 30 years: Effect of climate change or direct human impact?
10:10–10:30	S6 DOC: **T. Lambert:** Landscape and hydrological controls on the downstream transport of dissolved organic matter in the Congo and Zambezi rivers	S16 Isotopes: **G. Gebauer:** Hydrogen stable isotopes in organic matter – an underrepresented tool in ecological and environmental studies	S2 Long-term trends: **G. B. Lawrence:** Monitoring forest soils over time to understand acidic deposition effects and recovery		S19 Arctics: **C. Beer:** Northern high latitude carbon mean residence times across systems and scales
10:30–10:45	COFFEE BREAK				
10:45–11:05	S6 DOC: **J. Ide:** Comparisons of molecular species of dissolved organic matter in throughfall between conifer plantations and broad-leaved forests in western Japan	S16 Isotopes: **B. Mayer:** Multi-isotope tracing (N, O, S, B) of sources and fate of nutrients in riverine systems of Western Canada	S2 Long-term trends: **P. Schleppi:** Nitrate leaching from a sub-alpine coniferous forest subjected to experimentally increased N deposition for 20 years, and effects of tree girdling and felling	S17 Archives: **O. López-Costas:** Atmospheric metal pollution in Roman times: Human skeletons as archives	S19 Arctics: **H. Šantrůčková:** Significance of dark CO_2 fixation in arctic soils
11:05–11:25	S6 DOC: **K. Bowering:** Water drives the quantitative transport of dissolved organic matter in boreal regions with high annual rain and snowfall	S16 Isotopes: **S. K. Wexler:** Nitrous oxide flux and nitrate isotopic composition in an agriculturally impacted catchment	S2 Long-term trends: **J. Hruška:** Forest re-growth and DOC increase may reverse recovery from acidification in acid-sensitive areas of the Central Europe	S17 Archives: **K. Hansen:** Wet deposition of nitrogen and sulphur compounds in Sweden over 60 years, 1955–2014	S3 Atmosphere: **K. Butterbach-Bahl:** Long-term monitoring of biosphere-atmosphere exchange of N_2O and CH_4 fluxes at forest and grassland sites: What are the requirements to improve its usefulness for climate change studies?
11:25–11:45	S6 DOC: **S. E. Ziegler:** Increased soil dissolved organic carbon fluxes with temperature and precipitation along a boreal forest climate transect	S16 Isotopes: **L. C. Andresen:** Free amino acid dynamics in the soils of Eucalyptus FACE	S2 Long-term trends: **W. Schaaf:** Twelve years of monitoring the ecological development of a constructed catchment	S17 Archives: **M. Mętrak:** Development of a high-mountain lake in the Eastern Pamir, Tajikistan: Climatic and anthropogenic influences	S3 Atmosphere: **A. I. Gärdenäs:** Indications of a shift in microbial community composition induced by long-term nitrogen load
11:45–12:05	S6 DOC: **D. T. Monteith:** An internationally consistent relationship between long-term change in dissolved organic carbon concentration and the ionic strenght of remote surface waters	S16 Isotopes: **E. A. Golovatskaya:** The change of the carbon ($\delta^{13}C$) and nitrogen ($\delta^{15}N$) stable isotope composition in the decomposition process of peat-forming plants	S2 Long-term trends: **S. A. Norton:** Stream cation and Al trajectories during acidification and recovery at the Bear Brook Watershed in Maine, USA	S14 Microbes: **P. Baldrian:** Response of the microbial community in a coniferous forest to changes in C flux	S3 Atmosphere: **N. P. Rosenstock:** Implications of nitrogen deposition effects on ectomycorrhizal communities for forest health and nutrient uptake
12:05–12:25	S6 DOC: **H. A. de Wit:** Changes in browning rates between the 1990s and 2000s in Europe and North America – the unusual suspect?	S16 Isotopes: **J. Chen:** Gallium isotope analysis and possible application	S2 Long-term trends: **N. Zavalishin:** Dynamic models of biotic turnover in typical oligotrophic peatland landscapes of middle and southern taiga in Western Siberia	S14 Microbes: **I. Djukic:** Litter decomposition patterns and dynamics across biomes: Initial results from the global TeaComposition initiative	S3 Atmosphere: **E. Remy:** Nutrient cycling in forest herbs: Disentangling interacting effects of past and present environmental changes in a multi-factor experiment

Time	ROOM A	ROOM B	ROOM C	ROOM D	ROOM E
12:25–13:25	LUNCH				
13:25–14:05	**PLENARY LECTURE** **S. Manzoni: Nutrient constraints on metabolism from microbial communities to ecosystems**				
14:10–14:30	S6 DOC: **M. Camino-Serrano:** Modeling dissolved organic carbon dynamics in the land surface model ORCHIDEE-SOM	S16 Isotopes: **R. Hindshaw:** Monitoring the extent of water-rock interaction in permafrost dominated catchments using Li and U isotopes	S7 Nitrogen: **M. Maljanen:** Emissions of nitrous acid (HONO), nitric oxide (NO), and nitrous oxide (N_2O) from N-rich soils and horse dung samples	S19 Arctics: **S. A. Zimov:** Pasture ecosystems can mitigate permafrost thawing	S11 Stoichiometry: **P. Čapek:** Plant-microbial interaction induces global nitrogen and phosphorus co-limitation of primary production
14:30–14:50	S6 DOC: **D. Zak:** Mobilization of dissolved organic matter in rewetted peatlands: Implications for downstream systems	S16 Isotopes: **G. Steinhoefel:** Quantifying shale weathering by Li isotopes at the Susquehanna Shale Hills Critical Zone Observatory	S7 Nitrogen: **T. Rütting:** Geographical variation in gross nitrogen mineralization in Amazonian forest soils	S19 Arctics: **K. Gavazov:** Ecological assessment of permafrost thaw: Do plant-soil interactions matter?	S11 Stoichiometry: **S. Vicca:** Nutrient effects on plant carbon allocation: The role of mycorrhizal fungi
14:50–15:10	S6 DOC: **J. Shanley:** DOM hysteresis in the Connecticut River basin, USA: Insigth on DOM sources and processes		S7 Nitrogen: **Y. Inagaki:** Leaf life span and mean residence time of nitrogen in hinoki cypress forests in Japan	S19 Arctics: **K. Diáková:** Decomposability of old organic carbon in permafrost-affected arctic soils	S11 Stoichiometry: **O. Franklin:** The role of mycorrhiza for carbon storage in forests: An ecosystem perspective
15:10–15:25	COFFEE BREAK				
15:25–15:45	S6 DOC: **M. Forsius:** Observed and predicted future changes of total organic carbon in Lake Päijänne catchment (southern Finland): Implications for water treatment of the Helsinki metropolitan area	S2 Long-term trends: **A. Tietema:** The carbon balance of an aging heathland	S7 Nitrogen: **M. I. Makarov:** Nitrogen in alpine ecosystems of the Northern Caucasus	S19 Arctics: **C. Voigt:** Carbon flux dynamics before, during, and after permafrost thaw in subarctic tundra	S11 Stoichiometry: **A.-K. Bergström:** Changes in climate and atmospheric deposition induce differences in plankton stoichiometry and limitation and regeneration of nutrients in northern lakes
15:45–16:05	S6 DOC: **W.-J. Zhou:** The role of hydrological processes transporting carbon in the carbon budget of a tropical rainforest	S2 Long-term trends: **C. Meyer-Jacob:** Long-term perspectives on lake-water organic carbon levels in NE North America: Linking monitoring data and paleolimnological reconstructions	S7 Nitrogen: **G. M. Gettel:** Nitrogen biogeochemistry in the Lake Victoria Basin: Sources, sinks and challenges for food security and water quality	S19 Arctics: **H. Aaltonen:** Effects of forest fire on soil temperature sensitivity, respiration and soil organic matter quality in Canadian permafrost	S11 Stoichiometry: **K. Karhu:** Priming effects in boreal soils explained by stoichiometric drivers
16:05–16:25	S4 Belowground C: **M. Liimatainen:** Granulated wood ash fertilization increases tree growth but also peat decomposition in boreal peatland forests	S2 Long-term trends: **A. Räike:** Trends in organic and inorganic carbon export from Finnish rivers to the Baltic Sea	S7 Nitrogen: **Z. Sheng:** Effects of nitrogen deposition on a temperate grassland in Inner Mongolia, China	S19 Arctics: **J. P. van Leeuwen:** Soil food web assembly and vegetation development in a glacial chronosequence in Iceland	S11 Stoichiometry: **Y. Mau:** Stochastic dynamics of soil nutrients
16:25–16:45	S4 Belowground C: **P. Straková:** Fine root production and soil organic matter quality measured using infrared spectroscopy	S2 Long-term trends	S7 Nitrogen	S19 Arctics: **E. A. Zarov:** Estimation of carbon and nitrogen stock in tundra soils of the Taz Peninsula and adjacent territories on the basis of field survey and satellite images	S11 Stoichiometry: **H. Y. Gan:** Coupling of carbon and nutrient mineralization: What is the role of land use?
16:45–18:00	POSTER SESSION				*Invited talks are on gray background*